USA1500 Repair Guide



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PLEASE CALL CUSTOMER SERVICE FOR ASSISTANCE: 1-877-467-8643

A

How To Remove The Center From The Wooden Cabinet

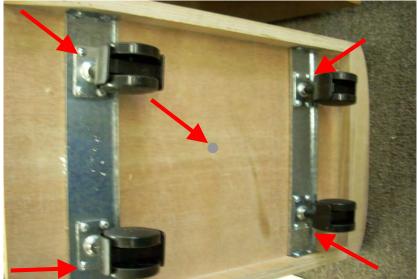
!!Unplug The Heater Before Servicing!!

(Remember That The Edges Of The Metal Are Sharp. Use Caution)

To remove the center unit from the cabinet, there will be 2 to 6 screws located on the back of the heater which will need to be removed. There are 2 under the filter and possibly 4 others, if there are brackets, on the sides (SEE PHOTO BELOW FOR SCREW LOCATIONS).



Turn the heater on its side and remove the 4 outer corner screws on each caster mounting bracket. Also remove the single screw that is located in the middle of the cabinet. These screws will be about 1 ½ inches long. Some units will have more than 1 long screw per caster. If this is the case, the metal center will not slide out freely and you will have to check for other longer caster screws (SEE PHOTO BELOW FOR SCREW LOCATIONS). **You may use the power cord to gently pull the center out of the wooden cabinet.



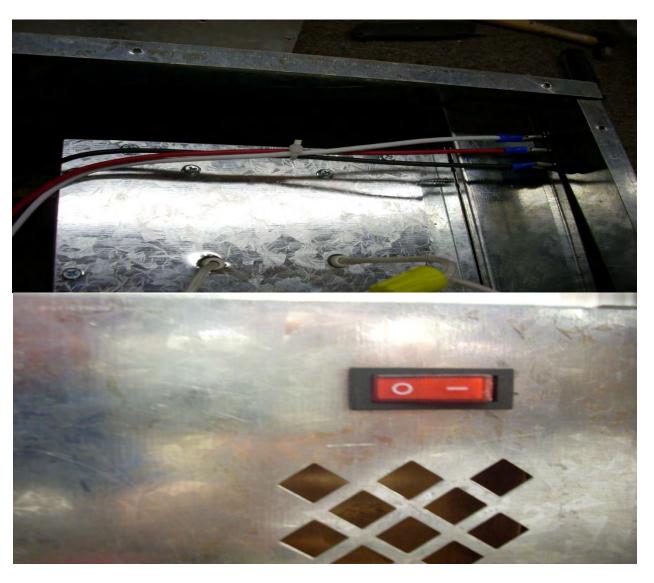
B

How To Replace The On/Off Power Switch

!!Unplug The Heater Before Servicing!!

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Lay the metal unit on its left side (when you are looking at the back of the unit). Remove all of the screws that secure the side panel on and lift the panel off. You should now be able to see the front switch. Mark all of the wires so you know the order to reattach to the new switch. Also note the position of the ZERO and the MINUS signs on the switch before you remove it, which sign is up and/or down. After you have marked the wires and note the switch positions, you can unhook the wire leads from the faulty switch. Remove it and replace with the new switch. Be sure to replace the wire leads in the same order you removed them. Put the side panel back on and put the metal unit back in the cabinet. Put the screws in the casters and on the back of the unit (PLEASE SEE PHOTOS BELOW FOR REFERENCE).



How To Replace The Power Cord

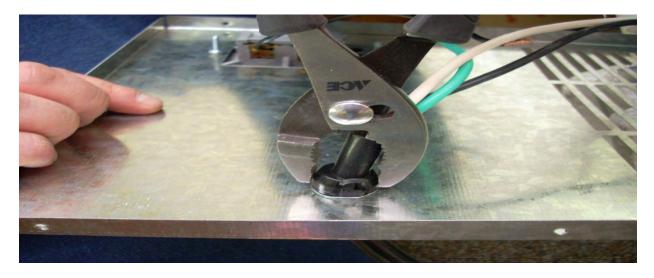
!!Unplug Heater Before Servicing!!

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Remove all of the screws that hold the right & the left side panels on to the heater. Remove the 6 screws that hold the rear panel that has the thermostat & the power cord on it (SEE PHOTO BELOW FOR SCREW LOCATION & PANEL IDENTIFICATION).



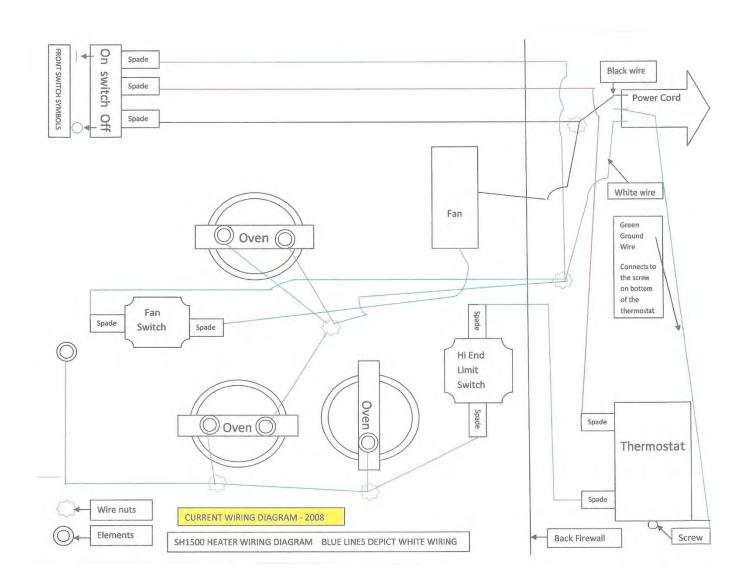
To remove the defective power cord, you will need to use pliers to squeeze the cord strain relief from inside the panel and push it out (SEE PHOTO BELOW FOR REFERENCE).



Disconnect the faulty cord by removing 2 power leads; wire nuts that connect the black power wire to the fan and from the white wire group that lead to the ovens. Power leads may either be 1 red and 1 black wire or 2 black wires depending on which power cord you have on your heater.

Disconnect the green ground wire from the bottom of the thermostat. Squeeze the cord strain relief from the outside of the panel in order to push it back into the hole. Reconnect the power cord with the wire nuts and the ground wire to the screw on the bottom of the thermostat.

Both wires on the new HPN cord are black and universal. It will not matter which goes to which location.



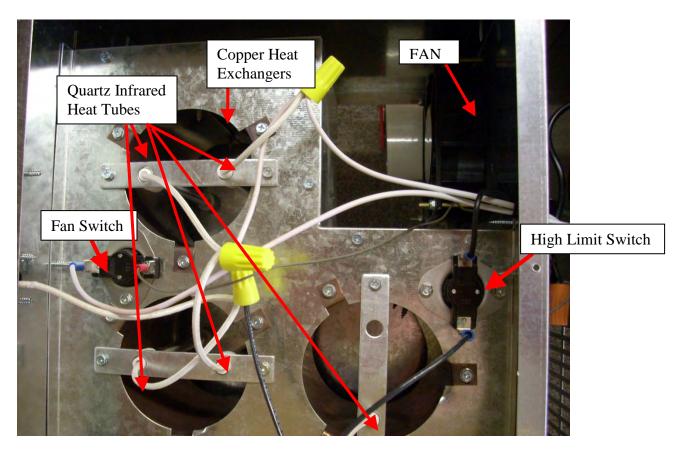
D

How To Replace The High Limit Switch

!!Unplug The Heater Before Servicing!!

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Lay the metal unit on the right side (when you are looking at the back of the unit). Remove the screws on the left side and lift the panel off. You should now see the 3 round copper heat exchangers, 5 quartz infrared heat tubes suspended inside of the copper exchangers, 1 long heat tube in front, and the circulation fan (fan will be to your right). The switch to the right is the High Limit Switch & the switch to the left is the Fan Switch. To replace the High Limit Switch you will need to remove the wire leads from the faulty switch and the 2 screws which hold the switch in place. Remove the faulty switch and replace it with a new one. Remember to replace the wire leads back onto the new switch. Replace all securing screws (SEE PHOTO BELOW FOR HIGH LIMIT SWITCH LOCATION).



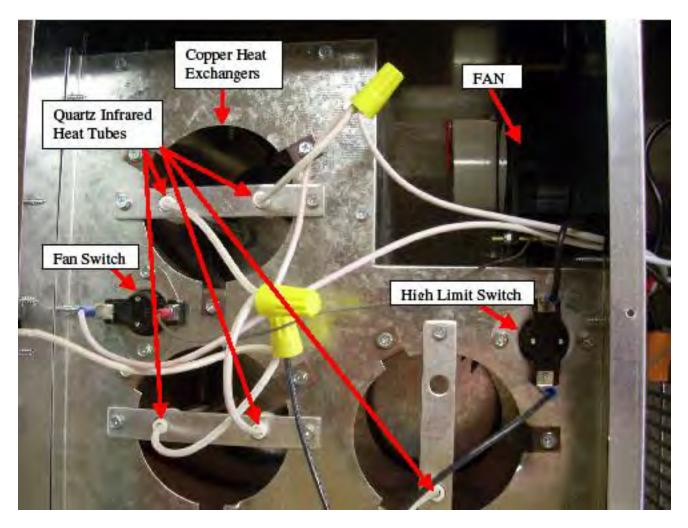
E

How To Replace The Fan Switch (Fan Switch will be labeled 45c)

!!Unplug The Heater Before Servicing!!

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Lay the metal unit on the right side (when you are looking at the back of the unit). Remove the screws on the left side and lift the panel off. You should now see the 3 round copper heat exchangers, 5 quartz infrared heat tubes suspended inside of the copper exchangers, 1 long heat tube in the front, and the circulation fan (fan will be to your right). The switch to the right is the High Limit Switch & the switch to the left is the Fan Switch. To replace the Fan Switch you will need to remove the wire leads from the faulty switch and the 2 screws which hold the switch in place. Remove the faulty switch and replace it with a new one. Remember to replace the wire leads back onto the new switch. Replace all securing screws (SEE PHOTO BELOW FOR FAN SWITCH LOCATION).



How To Replace The Quartz Infrared Heating Elements

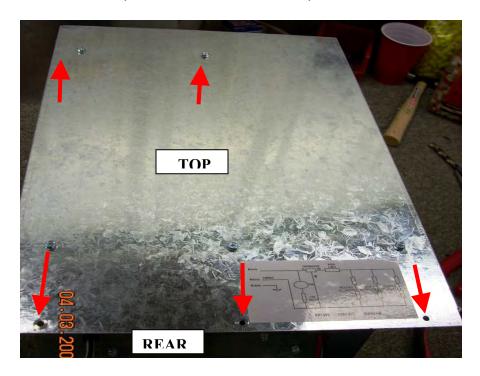
!!Unplug The Heater Before Servicing!!

(Remember That The Edges Of the Metal Are Sharp. Use Caution)

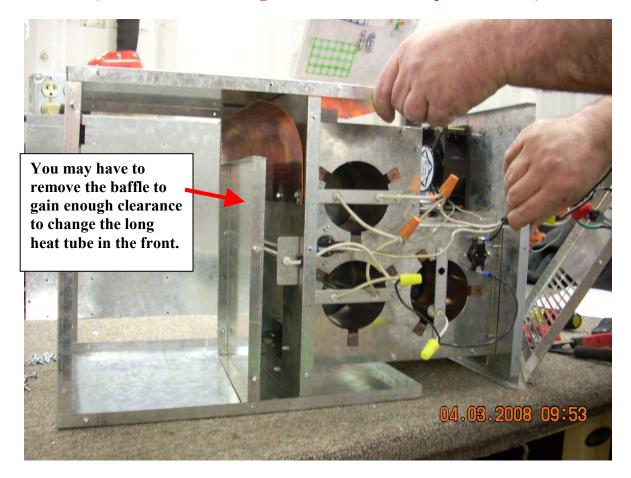
Remove both left & right cover panels from the unit. To see exactly which heat tube is burned out, you will have to plug the heater in and turn it on. Wait until the heat tubes start to glow an orange color. The heat tubes are wired in a series of 2 so if one tube burns out, it may cause the heat tube that it is wired with to stop working as well. After determining which heat tubes are not working, shut unit off & unplug. Wait until the heat tubes have cooled off. (Keep Track Of How The Wires Are Connected So You Can Reconnect Them The Same Way Later). From the right side of the unit (Right & left sides are determined when looking at unit from behind where the thermostat is), find the wires that belong to the heat tubes that are not working. Unscrew the wire nut that connects these two lamps together. From the left side (the side with the copper ovens), find the wires that belong to the heat tubes that are not working and unscrew the wire nuts. Remove the screws that hold the heat tube suspension brackets in place & remove the heat tube. At this point you can inspect the condition of the heat tubes that you removed to determine which heat tube needs to be replaced. (If unsure of the heat tube that is burned out go ahead and replace both lamps).

Replace Front (Long) Heat Tube

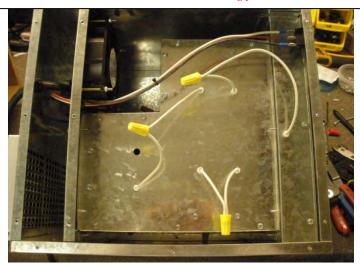
Both side panels and the rear panel need to be removed. Five (5) additional screws from the top of the unit will need to be removed as well (See photo below for screw location). After the removal of the side panels, rear panel and the 5 screws from the top, the entire mainframe can be slid back to allow access to the front heat tube (See photo on next page). After gaining access to the front heat tube, remove the screws from 1 of the 2 brackets that hold the heat tube in place. Disconnect wires & replace the burned out tube with a new one.



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This picture shows the wiring connections for the heating elements on the power switch side...NOTE: Please check element location and wire accordingly

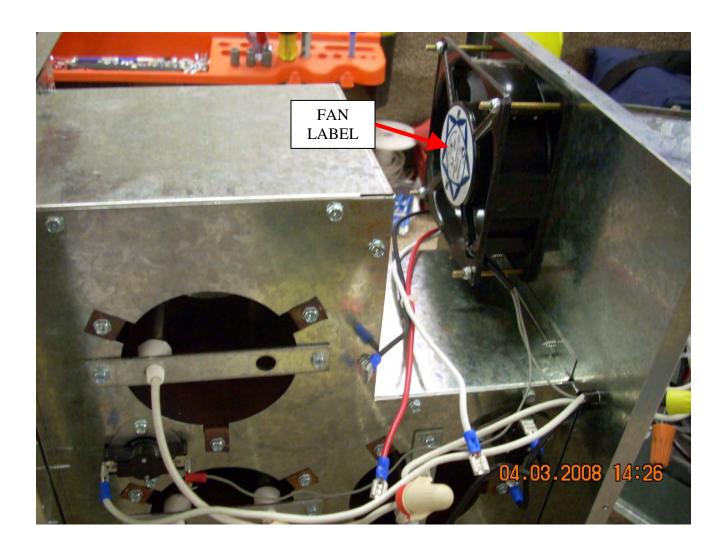


How To Replace The Circulation Fan

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Both side panels and rear panel need to be removed for easier access to the fan. The fan has two thin grey wires running out of its housing. One fan wire will go to the fan switch (refer to wiring diagram) and one wire will go through a hole in the mainframe wall to the white wire of the power cord. Remove the fan power wires. Use a pair of pliers to hold the locknut and a #2 Phillips screwdriver to loosen the anchor screws that hold the fan into place. Make sure that when you install the new fan that the label faces towards the front of the heater. (See photo below for fan direction).





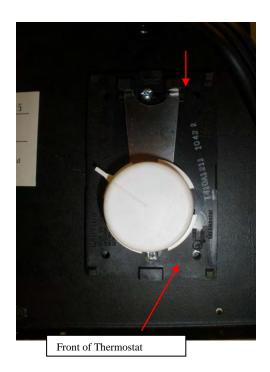
How To Replace The Honeywell Thermostat

!!Unplug The Heater Before Servicing!!

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Both side panels and rear panel need to be removed for easier access. Pull the white housing cover off of the thermostat. Remove the 2 screws that hold the thermostat on to the rear panel; this will disconnect the green ground wire which is attached to the bottom screw of the thermostat. There will be 2 wires leading out of the defective thermostat. You will need to remove only the 2 wire nuts that connect these wires in order to disconnect the thermostat. Replace the new thermostat, making sure to place it with the dial pointing to the top. When attaching the new thermostat be sure to replace the green ground wire on the bottom screw of the thermostat.

The top wire on the thermostat needs to connect to the red wire which attaches to the center spade on the On/Off Switch. The bottom wire attaches to the black wire that is connected to the High Limit Switch. Be sure the wires are tightly wound together and the wire nuts are screwed tightly on the wires. You should be able to pull the wire nut without it coming off.





A.

